



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,132	12/05/2005	Stefan Wilhelm	LINDE-627	2561
23599 7590 08/06/2010 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			EXAMINER PETTITT, JOHN F	
			ART UNIT 3744	PAPER NUMBER
			NOTIFICATION DATE 08/06/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mwzb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,132	<b>Applicant(s)</b> WILHELM, STEFAN	
	<b>Examiner</b> John F. Pettitt	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 7-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

**Claims 2-5, 7-30** are objected to because of the following informalities:

The recitation, "the enclosure around one or more parts of a low-temperature air separation system" (line 7 - claim 7; line 8 - claim 26, line 11 - claim 27) conflicts with the previous recited low temperature air separation system and should read --the enclosure around one or more parts of **the** low-temperature air separation system-- in order to remove the conflict.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 3744

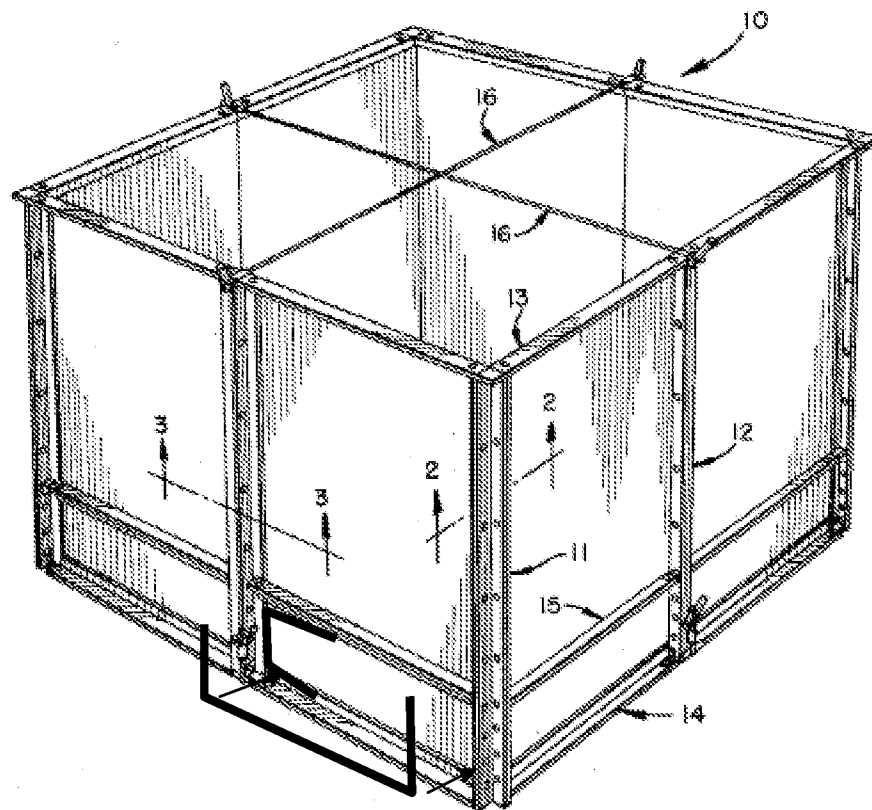
**Claims 2-5, 7-9, 11-20, 23, 24, 26, 28, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard (US 6167723) in view of Carren et al. (US 4331252). In regard to claims 7, 11, 15-17, 26, 28, 29, Guillard teaches a process for producing an enclosure for parts of a low temperature air separation system (Figure 1; column 2, line 66, distillation system), the enclosure (17) having a base and side walls (inherent to cold box 17; column 3, lines 30-35); forming the enclosure around the air separation system (distillation system); and filling the enclosure with thermal insulation (column 4, line 66).

Guillard does not explicitly teach that the cold box is formed by connecting several panels each having a metal frame and a sheet metal lining. However, forming enclosures of several panels is a well known method of constructing insulation containers, as is taught for example by Carren. Carren teaches an enclosure having several metal panels (19 and flanges), each having a frame (flanges, such as 16, 18) and a sheet metal lining (19; column 3, line 5), wherein in each of said panels (flanges 19) said frame (flanges) is attached to the periphery of said sheet metal lining (19; see figure below - flanges are on periphery or edge of lining 19). Further it is noted that Carren teaches that each of the frames (flanges of each panel) comprises four U-sections that run peripherally on four sides of the frame , each of said U-sections each having a base and two legs which together form the U-shape (see figure below, noted that a u-shape is highlighted and separated from the structure to make it easier for the applicant to see that each frame comprises U-sections that are on at least four sides; it is further noted that the flanges of figures 7-8 also show a U-shape; further note that the legs of one U-section may be a base of another U-shape). Carren teaches that the

Art Unit: 3744

enclosure permits various sizes to be easily created from the modular components.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the modular enclosure of Carren in providing the cold box of Guillard for the purpose of allowing different sized cold boxes to be created with greater simplicity. It is noted that the frames (flanges) are provided with diagonal braces (30, 40) mounted on the frames (16-18) and are cylindrical.



With regard to claims 2-3, joints (corners) of the panels (frames, 19) on one side wall all have the same distance from one another in the height direction (Fig. 1; panels of the enclosure do not get wider or narrower in the height dimension); additionally noted that Carren shows a square structure. With regard to claims 4, 20, the combination

Art Unit: 3744

discussed is that the sidewalls of Guillard would employ the panels of Carren. With regard to claim 5, the panels are 2-4 meters (column 4, line 56, 4 by 8 ft). In regard to claim 8, Carren teaches that the panels are screwed together (bolted; column 3, line 20). In regard to claim 9, it is noted that assembling the sidewalls of Guillard from the panels of Carren inherently requires assembly before some other aspect of assembly of at least two panels and that integration of at least two panels is also inherent in order to form a rectilinear form. With regard to claim 12, the steel lining (19) of Carren is not explicitly taught to be of a thickness of 3-5mm. However, this is seen to be a routine design choice depending on the structural requirements of the particular cold box desired. In regard to claim 13, the legs of the U-sections each point towards an inside of the panel (see figure above, the legs point toward the middle of the panel rather than pointing away from the middle of the panel) such that the frame (flanges) is bordered to the outside by the base section and leg sections of each U-section (as U-sections of flanges are on periphery). In regard to claim 14, the frames being provided with vertical stiffeners in the form of L-shaped steel sections (17). In regard to claims 18-19, it is noted that Carren teaches that a sidewall is formed from several panels and that the panels are vertically arranged (see figure). In regard to claim 23, the low temperature system comprises a low pressure column (5). In regard to claims 24, 28, the frames (flanges) are reinforced with vertically arranged sections (27, 38; column 4, lines 20-25).

**Claims 22, 27, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Carren and further in view of Klonne DE 648528. In regard to claims 22 and

Art Unit: 3744

27, Guillard and Carren teach most of the claim limitations but do not appear to explicitly teach that after the panels are screwed together and that the panels are welded to make the enclosure as a whole gas tight. However, welding enclosures that have been bolted together for assembly is a well known means of sealing enclosures as taught by Klonne (See Figure of For. reference and machine translation, wherein bolts secure members and are then welded to seal members forming vessel). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Guillard and Carren to weld the panels after bolting and assembly for the purpose of providing a more permanent seal and for the purpose of reducing heat leak via air leakage into the cold box of Guillard and Carren. In regard to claim 29, see claims 11, 17.

**Claims 10, 21, 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Carren and further in view of Bracque et al. (US 5461871). With regard to claims 10 and 25, Guillard and Carren teach most of the limitations but do not explicitly teach that before installation, system parts or accessories are mounted on a panel. However, Bracque teaches that cold boxes are known to be made with a plurality system ports (33 for example) for air distillation fluid flows as well as instrumentation assemblies (121; column 3, line 36, 55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Guillard and Carren with ports and other user accessories as taught by Bracque for the purpose of making the cold box more accessible and easier to maintain. In regard to

Art Unit: 3744

claim 21, official notice is taken that walkways (ladders, steps, railings etc) are a known means for making facilities more accessible for maintenance crews and therefore for the same reasons of accessibility as stated above, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add walkways to the panels before assembly so that such means would be immediately available for use after installation.

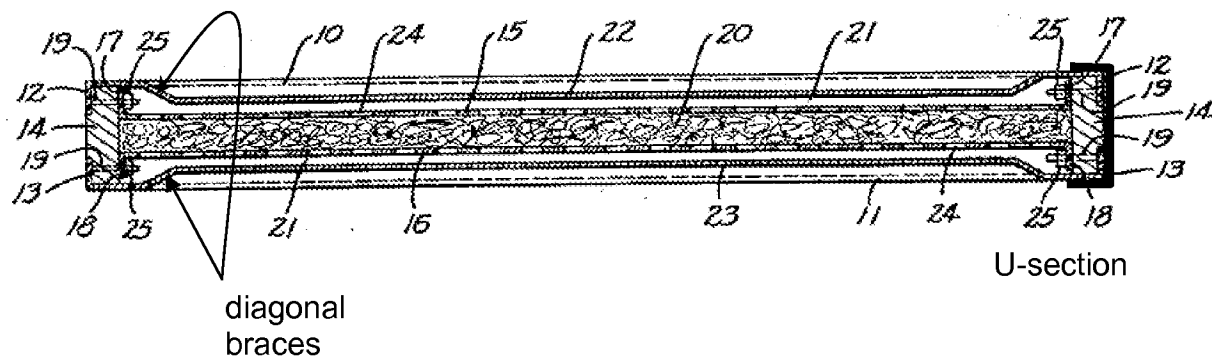
**Claims 2-5, 7-9, 11-20, 22, 24, 26, 28, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard (US 6167723) in view of Nystrom (US 2231216). Guillard teaches a process for producing an enclosure for parts of a low temperature air separation system (Figure 1; column 2, line 66, distillation system), the enclosure (17) having a base and side walls (inherent to cold box 17; column 3, lines 30-35); forming the enclosure around the air separation system (distillation system); and filling the enclosure with thermal insulation (column 4, line 66).

Guillard does not explicitly teach that the cold box is formed by connecting several panels each having a frame and a sheet metal lining. However, forming enclosures of several panels is a well known method of constructing insulation containers, as is taught for example by Nystrom. Nystrom teaches an enclosure having several panels (12), each having a metal frame (at least flanges, 12-13, also may include 17,18) and a sheet metal lining (15, 16, 10, 11), wherein in each of said panels said frame (12, 13) is attached to the periphery of said sheet metal lining (15, 16, 10, 11); wherein each of the frames (flanges, 12, 13) of Nystrom comprise four U-sections



Art Unit: 3744

(see figure below) that run peripherally on four sides; each of said U-sections are formed of a base (portions of flanges on short edge) and two legs (portions of flanges on long edge) Nystrom teaches that the panel forms enclosures for refrigerated containers (column 1, line 11) and that the panels permit easy construction (column 1, line 30). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the panels of Nystrom in providing the cold box of Guillard for the purpose of providing an easily constructed well insulated (Nystrom-column 1, line 13) cold box.



With regard to claims 2-3, Nystrom teaches joints (corners) of the panels (12) on one side wall all have the same distance from one another in the height direction (Fig. 1; panels of the enclosure do not get wider or narrower in the height dimension). With regard to claims 4, 20, the combination discussed is that the sidewalls of Guillard would employ the panels of Nystrom. With regard to claim 5, Nystrom teaches that the panels may be at least 2-4 meters (as the panels are for disclosed as suitable for a railcar). In regard to claim 8, Nystrom teaches that the panels are screwed together (bolted; column 2, lines 10-11). In regard to claim 9, it is noted that assembling the sidewalls of Guillard from the panels of Nystrom inherently requires assembly before some other

Art Unit: 3744

aspect of assembly of at least two panels and it is an obvious construction method to employ several wall members to form one larger wall. With regard to claim 12, the steel lining (15, 16, 10, 11) of Nystrom is not explicitly taught to be of a thickness of 3-5mm. However, this is seen to be a routine design choice depending on the structural requirements of the particular cold box desired. In regard to claim 13, the legs of the U-sections each point towards an inside of the panel (see figure above, the legs point toward the middle of the panel rather than pointing away from the middle of the panel) such that the frame (flanges 12, 13) is bordered to the outside by the base section and leg sections of each U-section (as U-sections of flanges are on periphery). In regard to claim 14, the frames being provided with vertical stiffeners in the form of L-shaped sections (17-18). In regard to claim 16, Nystrom further teaches that the frames (12, 13) are provided with diagonal braces (see figure below) mounted on the frames (flanges). In regard to claims 18-19, it is noted that it is an obvious modification of Nystrom to provide a sidewall to be formed from several panels and that the panels are vertically arranged (to be sidewalls of Guillard). In regard to claim 23, the low temperature system comprises a low pressure column (5). In regard to claims 24, 28, the frames (12, 13) are reinforced with vertically arranged sections (14).

**Claims 22, 27, 29, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Nystrom and further in view of Klonne DE 648528. In regard to claims 22 and 27, Guillard and Nystrom teach most of the claim limitations but do not appear to explicitly teach that after the panels are screwed together and that the panels are

Art Unit: 3744

welded to make the enclosure as a whole gas tight. However, welding enclosures that have been bolted together for assembly is a well known means of sealing enclosures as taught by Klonne (See Figure of For. reference and machine translation, wherein bolts secure members and are then welded to seal members forming vessel). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Guillard and Nystrom to weld the panels after bolting and assembly for the purpose of providing a more permanent seal and for the purpose of reducing heat leak via air leakage into the cold box of Guillard and Nystrom. In regard to claim 29, see claims 11, 17. In regard to claim 30, Nystrom teaches that adjacent panels (12) at a corner of the enclosure are arranged such that the base of a vertical U-section of one panel and one leg of a vertical U-section of the other panel contact one another. The modification of Guillard and Nystrom discussed above wherein the panels are bolted and welded would thus bolt the leg of pane and base of another panel together for the purpose of welding the metal components and for the purpose of providing the seal previously discussed.

**Claims 10, 21, 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillard, Nystrom, and further in view of Bracque et al. (US 5461871). With regard to claims 10 and 25, Guillard and Nystron teach most of the limitations but do not explicitly teach that before installation, system parts or accessories are mounted on a panel. However, Bracque teaches that cold boxes are known to be made with a plurality system ports (33 for example) for air distillation fluid flows as well as instrumentation

Art Unit: 3744

assemblies (121; column 3, line 36, 55). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Guillard and Nystrom with ports and other user accessories as taught by Bracque for the purpose of making the cold box more accessible and easier to maintain. In regard to claim 21, official notice is taken that walkways (ladders, steps, railings etc) are a known means for making facilities more accessible for maintenance crews and therefore for the same reasons of accessibility as stated above, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add walkways to the panels before assembly so that such means would be immediately available for use after installation.

### ***Response to Arguments***

Applicant's arguments filed 6/2/2010 have been fully considered but they are not persuasive.

1. Applicant's arguments (page 8, ¶ 4) are that Guillard provides no description of the elements of the thermal insulation enclosure, that the enclosure is formed as claimed with frame and sheet metal plates. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore the argument against Guillard alone is irrelevant to the rejection and unpersuasive.

2. Applicant's arguments (page 8, ¶ 5) are that enclosure taught by Carren is not taught to be used to enclose a distillation installation. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). There is no requirement for Carren to disclose every feature of the claim since the rejection is based on the combined teachings of both Guillard and Carren, which support the finding that it would have been obvious to construct the cold box of Guillard with the modular panels of Carren for the purpose of providing for the purpose of forming enclosures of various sizes from standard sized panels to improve the ease of forming the enclosure and reduce the cost thereof. It is further noted that the ability of the enclosure Carren to contain fluid is evidence that the enclosure would be appropriate for enclosing and retaining the insulation of Guillard.

3. Applicant's arguments (page 9, ¶ 4) are an allegation that Carren does not disclose that the panel is formed of a frame and sheet metal frame. In response to the applicant's arguments, the examiner fully disagrees as Carren teaches frame (16, 18) and sheet metal lining (19, column 3, line 5). Therefore the allegation is false. Further, in regard to the allegation that the claims require that the frames be assembled before attachment to the sheet metal, it is noted that the claims make no limitation as to the order of assembly.

4. Applicant's arguments (page 10, ¶ 2) are an allegation that there is no rationale why one would use the modular enclosure structure of Carren to form the enclosure of Guillard. In response to the applicant's arguments, the examiner fully disagrees as the rejection explicitly showed that one would be motivated by the ability to construct various sized enclosures capable of containing fluids from standard sized components thus reducing the complexity and cost of providing the enclosure.

5. Applicant's arguments (page 10, ¶ 2) are that since Carren teaches embodiments that are 8 feet tall that larger sizes would not be obvious. In response to the applicant's arguments, the examiner disagrees since those of ordinary skill in the art know how to select the sizes of components (frames, bolts, sheet metal thickness, etc) to meet the overall sizing requirements, as such sizing is a routine matter. Further, the modularity benefits and cost saving benefits would apply to all sized enclosures.

6. Applicant's arguments (page 10, ¶ 2) are that Carren's disclosure of using the enclosures for swimming pools would somehow make the steel enclosure and modular construction unsuggestive to those considering the construction of a cold box for a distillation installation. In response to the applicant's arguments, the examiner disagrees since there is no reason provided by the applicant as to why the enclosure of Carren which is capable of containing water and handling the large hydrostatic stresses associated with containing water would be unsuitable for being used as the cold box of Guillard. However, on the other hand the evidence suggests the use of the enclosure of Carren as a suitable cold box construction since perlite is a light material, being at least 8 times less dense than water, therefore, the enclosure is

Art Unit: 3744

clearly capable of containing the perlite and performing the function of enclosing. In addition, cryogenic cold boxes are routinely formed of steel enclosures and therefore again, those of ordinary skill in the art would be looking to none other than other steel enclosures. Therefore the allegation is unpersuasive.

7. Applicant's arguments (page 10, ¶ 3) are that since Guillard teaches that the cold boxes would be prefabricated in the factory that modular benefits would be unnecessary. In response to the applicant's arguments, the examiner disagrees as the reduction in complexity that comes with standard sizes components reduces costs regardless of the location of assembly. It is further noted that pre-fabrication in the factory suggests the use of modular panels for assembly since such provides the opportunity for increased production and reduced cost as well known from the industrial revolution and later with the popularization of the assembly line and mass production. Therefore the argument is not persuasive.

8. Applicant's arguments (page 10, ¶ 4-5) are that the applicant is uncertain how the U-shape is formed. In response to the applicant's arguments, the examiner directs the applicant to the figures above and further note that the flanges together form a U-shape. Therefore their shape individually and separated from the enclosure is of no relevance.

9. Applicant's arguments (page 10, ¶ 6) are an allegation that the frames do not have legs that point towards the middle of the panel. In response to the applicant's arguments, the examiner disagrees as clearly shown in the figure the adjoining sides

Art Unit: 3744

form the legs and point towards the middle of the panel not away therefrom, therefore the allegation is unpersuasive.

10. Applicant's arguments (page 11, ¶ 1) are an allegation that the braces are not diagonal. In response to the applicant's arguments, the examiner disagrees as the statement that to be diagonal the structure must lie along "the diagonal" ignores the fact that there is no such thing as just one "the diagonal". Diagonal is plainly understood as at an angle, such as she lives diagonally across the street from my place. therefore the allegation is unpersuasive.

11. Applicant's arguments (page 11, ¶ 2) are that the welds of the posts 30, 40 do not seal contact points. In response to the applicant's arguments, the examiner disagrees as contact points may be any number of points of contact.

12. Applicant's arguments (page 11, ¶ 3) are that the stiffener (17) of Carren may not be a stiffener as such is part of the frame. In response to the applicant's arguments, the examiner notes that the frame identified in the rejection as elements (16, 18) meets all of the limitations of the frame as claimed, therefore, the argument that the frame may not be further supported or connected to stiffener (17) ignores the ground of rejection. The argument that without the stiffener there is no frame ignores the fact that the claims do not make any requirement of what the frame must do or have when not connected to the stiffener and therefore the allegation is irrelevant to the claimed invention and the rejection.

13. Applicant's arguments (page 13, ¶ 1) are that the flanges of Nystrom may not be frames (presumably) because of their connection with sheets (10, 11, 15, 16). In



Art Unit: 3744

response to the applicant's arguments, the examiner disagrees as there is nothing in the claim that restricts how the sheet metal lining and the frames are connected therefore the allegation is unpersuasive.

14. Applicant's arguments (page 13, ¶ 2) are that the flanges 12, 13, 17, 18 are not attached to the periphery of the sheets 10, 11, 15, 16. In response to the applicant's arguments, the examiner disagrees as the allegation is false since the flanges are attached to the edges of the sheet metal lining 10, 11, 15, 16. It is further noted that base contradiction is not a persuasive argument.

15. Applicant's arguments (page 13, ¶ 4-5) are an allegation that the rejection presents no rationale why one would combine the teachings of Guillard and Nystrom. In response to the applicant's arguments, the examiner disagrees as the allegation ignores the grounds of rejection wherein it was shown that one would be motivated to employ the panels of Nystrom in providing the cold box of Guillard for the purpose of providing an easily constructed well insulated (Nystrom-column 1, line 13) cold box. It is further noted that the disclosure of Nystrom that the panels are suitable for refrigerated rail cars suggests that such panels would be durable and capable of withstanding the small stresses caused by carrying light perlite. It is further noted that the insulative properties of panels also suggests their use in forming the enclosure of a cold box for Guillard. Lastly, in response to the allegation that the pre-fabrication teachings of Guillard would make the use of the panels of Nystrom unnecessary, the examiner disagrees as the reduction in complexity that comes with standard size components, reduces costs regardless of the location of assembly. It is further noted that pre-fabrication in the

Art Unit: 3744

factory suggests the use of modular panels for assembly since such provides the opportunity for increased production and reduced cost as well known from the industrial revolution and later with the popularization of the assembly line and mass production. Therefore the argument is not persuasive.

16. Applicant's arguments (page 13, ¶ 6) are an allegation that the flanges do not comprise U-sections. In response to the applicant's arguments, the examiner directs the applicant to the figures above and further notes that the flanges together form the U-shape and that it is immaterial what shape the flanges may form when separated and not part of the enclosure.

17. Applicant's arguments (page 14-15) are similar to the arguments against Carren and do not overcome the evidence and rationale presented by the final rejection above and therefore for similar reasons the arguments are not persuasive. The applicant is further directed to the rejection where it is shown how each of the several dependent claims is met by the enclosure of Nystrom.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 3744

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Pettitt whose telephone number is 571-272-0771. The examiner can normally be reached on M-F 8a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler or Frantz Jules can be reached on 571-272-4834 or 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John F Pettitt /

Application/Control Number: 10/520,132

Page 19

Art Unit: 3744

Examiner, Art Unit 3744

JFP III

| July 23, 2010

/Frantz F. Jules/

Supervisory Patent Examiner, Art Unit 3744